

CÁMARA DE RED TÉRMICA

Manual del usuario

TNO-3010T/TNO-3020T/TNO-3030T/
TNO-3040T/TNO-3050T/TNO-L3030T

Cámara De Red Térmica

Manual del usuario

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❖ El diseño y las especificaciones están sujetos a cambio sin aviso.

❖ El ID inicial del administrador es “admin” y la contraseña debe establecerse al iniciar sesión por primera vez. Por favor, cambie su contraseña cada tres meses para proteger de forma segura la información personal y evitar daños por el robo de información.
Por favor, tenga en cuenta que es responsabilidad del usuario la seguridad y otros problemas causados por el mal manejo de una contraseña.

INSTRUCCIONES DE SEGURIDAD IMPORTANTES

1. Lea estas instrucciones.
2. Consérvelas.
3. Atente para todas las advertencias.
4. Siga todas las instrucciones.
5. No utilice este aparato cerca del agua.
6. Limpie el área contaminada en la superficie del producto con un paño seco y suave o un paño húmedo. (No utilice detergente o productos cosméticos que contengan alcohol, disolventes o tensioactivos o constituyentes de aceites, ya que pueden deformar o dañar el producto).
7. No obstruya ninguna apertura de ventilación. Instale el aparato siguiendo las instrucciones del fabricante.
8. No lo instale cerca de ninguna fuente de calor como radiadores, focos de calor o cualquier otro aparato (incluidos los amplificadores) que emita calor.
9. No olvide que la finalidad de los enchufes polarizados o de toma a tierra es proporcionarle seguridad. Un enchufe polarizado tiene dos clavijas, una más ancha que la otra. Un enchufe con toma a tierra tiene dos clavijas y una tercera de toma a tierra. Tanto la clavija más ancha, en el caso del enchufe polarizado, como la clavija adicional, en el caso del enchufe con toma a tierra, tienen como objetivo aportarle seguridad. Si el enchufe del aparato no encaja en su toma de corriente, póngase en contacto con un electricista para cambiar la toma de corriente obsoleta.
10. Evite pisar o doblar el cable de alimentación. Ponga especial cuidado para no hacerlo en enchufes, tomas de corriente y en los puntos en los que salen desde el aparato.
11. Utilice únicamente los dispositivos y accesorios especificados por el fabricante.
12. Utilice sólo las mesitas con ruedas, soportes, trípodes o mesas recomendadas por el fabricante o vendidas con el aparato. Cuando se utilice una mesita con ruedas, tenga cuidado al mover la mesita con ruedas junto con el aparato para evitar daños por vuelco.
13. Desenchufe este aparato durante tormentas eléctricas o cuando no se utilice durante largos períodos de tiempo.
14. Remita todas las reparaciones a personal de mantenimiento cualificado. Es necesario enviar el aparato para su reparación cuando ha sufrido cualquier tipo de daño, como, por ejemplo, que el cable o el enchufe de la alimentación está dañado, se han derramado líquidos sobre el aparato o algún objeto ha caído sobre él, el aparato ha sido expuesto a la lluvia o a humedad, no funciona correctamente o se ha caído al suelo.
15. Este producto está destinado a ser suministrado por una Unidad de Alimentación de la Lista con la marca "Clase 2" o "LPS" y clasificado de 24 Vac (50/60 Hz) min.0,7 A o 12 Vdc, min.0,65 A o PoE(48 V), 0,18 A.
16. Este producto se ha diseñado para recibir alimentación con aislamiento.
17. Si utiliza una fuerza excesiva al instalar el producto, es posible que la cámara pueda sufrir daños y funcione de forma incorrecta.
Si instala el producto de forma forzada utilizando herramientas no compatibles, es posible que el producto pueda sufrir daños.
18. No instale el producto en un lugar donde exista o pueda generarse sustancias químicas o niebla de aceite. Los aceites comestibles como el aceite de soja pueden dañar o deformar el producto, por lo que no debe instalar el producto en la cocina o cerca de la mesa de la cocina.
Esto podría causar daños al producto.
19. Al instalar el producto, tenga cuidado y no permita que la superficie del producto se manche con sustancias químicas. Algunos disolventes químicos como limpiadores o adhesivos pueden causar daños graves a la superficie del producto.
20. Si instala o desmonta el producto de una manera que no se ha recomendado, es posible que las funciones/rendimiento de producción no estén garantizados.
Instale el producto consultando "Instalación y conexión" en el manual del usuario.
21. La instalación o uso del producto en el agua puede causar daños graves al producto.



22. Este dispositivo ha sido probado usando un cable de red blindado (STP). Se recomienda el uso de una conexión a tierra GND apropiada y un cable STP para proteger eficazmente su producto y sus instalaciones de los voltajes momentáneos, las descargas eléctricas y la interrupción de la comunicación.

ADVERTENCIA

PARA REDUCIR EL RIESGO DE INCENDIO O DESCARGA ELÉCTRICA, MANTENGA ESTE DISPOSITIVO LEJOS DE LLUVIA Y/O LA HUMEDAD. NO INSERTE NINGÚN OBJETO METÁLICO EN LAS REJILLAS DE VENTILACIÓN NI EN NINGUNA ABERTURA DEL EQUIPO.

No debe exponer el aparato a gotas ni salpicaduras de agua ni a objetos con líquido, como jarrones, evitando colocarlos sobre el aparato.

Para evitar daños, este aparato debe instalarse de forma adecuada en el techo o la pared de acuerdo con las instrucciones de instalación.

PRECAUCIÓN

	PRECAUCIÓN NO ABRIR RIESGO DE SUFRIR UNA DESCARGA ELÉCTRICA	
PRECAUCIÓN : PARA REDUCIR EL RIESGO DE SUFRIR UNA DESCARGA ELÉCTRICA, NO RETIRE LA CUBIERTA (NI LA PARTE POSTERIOR). DENTRO NO HAY PIEZAS QUE PUEDAN SER REPARADAS POR EL USUARIO. REMITA EL APARATO A PERSONAL DE MANTENIMIENTO CUALIFICADO.		

EXPLICACIÓN DE LOS SÍMBOLOS GRÁFICOS



Un triángulo con un rayo y una punta de flecha es un símbolo de advertencia para avisar al usuario de la presencia de "voltajes peligrosos" dentro de la carcasa del producto que pueden ser lo suficientemente intensas como para constituir un peligro de descarga eléctrica.



Un triángulo con un signo de exclamación es un símbolo de advertencia para avisar al usuario de que hay instrucciones importantes de funcionamiento y mantenimiento (reparaciones) en la documentación que acompaña al aparato.

Construcción de clase I

Un aparato con construcción de CLASE I se conectará a una toma de corriente con la conexión de protección de tierra.

Batería

No debe exponer las baterías (paquete de batería o pilas instalados) a calor excesivo, a la luz directa del sol ni al fuego, etc.

No es posible sustituir la batería.

Desconexión del dispositivo

Desconecte el enchufe de corriente del aparato si está defectuoso. Y llame a un servicio de reparaciones.

Cuando lo utilice fuera de EE.UU., se puede utilizar el código HAR con acoplamientos de una agencia aprobada.

PRECAUCIÓN

Existe un riesgo de explosión si la batería se sustituye por otra que no sea adecuada. Tire las baterías usadas como se indica en las instrucciones.

Estas instrucciones de servicio están destinadas únicamente a personal de servicio técnico cualificado.

Para reducir el riesgo de descarga eléctrica no realice ninguna operación de servicio que no sean las indicadas en las instrucciones de funcionamiento a menos que esté cualificado para hacerlo.

El puerto de salida del monitor de pruebas del producto se proporciona para una mayor facilidad de instalación y no se recomienda para propósitos de monitoreo.

Utilice la alimentación de entrada con sólo una cámara y sin que estén conectados otros dispositivos.

El ITE solo se debe conectar a redes PoE sin enviarlo a la red externa.

Lea detenidamente las precauciones de seguridad recomendadas que se incluyen a continuación.

- No coloque este aparato sobre una superficie desigual.
- No lo instale en una superficie expuesta a la luz directa del sol, cerca de equipos de calefacción ni cerca de áreas frías.
- No coloque este aparato cerca de material conductivo.
- No intente reparar este aparato por sí solo.
- No coloque jarrones sobre el producto.
- No lo instale cerca de fuentes magnéticas.
- No bloquee las aberturas de ventilación.
- No coloque objetos pesados sobre el producto.
- Use guantes protectores cuando instale/desinstale la cámara.
La alta temperatura de la superficie del producto puede causar quemaduras.

El Manual del usuario es una guía sobre cómo utilizar los productos.

El significado de los signos que se utilizan en el manual es el siguiente.

- Referencia : en caso de que se facilite información de ayuda sobre el uso del producto
 - Aviso : si existe alguna posibilidad de que se produzcan daños en bienes o lesiones en personas causadas por no seguir las instrucciones
- ※ Lea este manual por razones de seguridad antes de utilizar los productos y guárdelo en un lugar seguro.

No garantizamos la calidad de los productos de terceros (por ejemplo, lentes, accesorios) que usted compre por separado.

En determinados entornos de instalación, pueden producirse interferencias en las comunicaciones de radio.

Cuando se producen interferencias de ondas electromagnéticas entre el producto y el dispositivo de radiocomunicación, se recomienda mantener cierta distancia entre ambos o cambiar la dirección de la antena receptora.

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CARACTERÍSTICAS RECOMENDADAS DEL ORDENADOR

- CPU : Intel(R) Core(TM) i7 a 3,4 GHz o superior
- RAM : 8G o superior
- Navegador recomendado: Chrome
- Navegadores compatibles: Chrome, Safari, Firefox, MS Edge(chromium based)
- SO admitido : Windows, Mac, Linux, Android, iOS, Chrome
- Entorno de verificación
 - Windows 10: Google Chrome versión 80 o posterior, Firefox versión 72 o posterior, MS Edge versión 83 o posterior
 - Mac 10.13/14: Safari versión 11.0.1 o posterior

※ El rendimiento de la reproducción de vídeo del visor web depende del rendimiento de la CPU y GPU del usuario.

ESPECIFICACIONES DE LA TARJETA DE MEMORIA MICRO SD/SDHC/SDXC RECOMENDADA

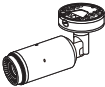
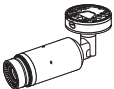
- Capacidad recomendada : De 16 GB a 256 GB (Se necesita tipo MLC o 3D TLC)
- Fabricantes recomendados: SanDisk, Transcend, Samsung
- Tipo de producto: Gran resistencia, resistencia profesional
- La compatibilidad varía en función de los fabricantes y tipos de tarjeta.

ESPECIFICACIONES RECOMENDADAS PARA NAS

- Capacidad recomendada : Se recomienda que sea de 200 GB o superior.
- Para esta cámara, se recomienda utilizar una unidad NAS con las siguientes especificaciones del fabricante.
Productos recomendados : QNAP NAS, Synology NAS

COMPONENTES

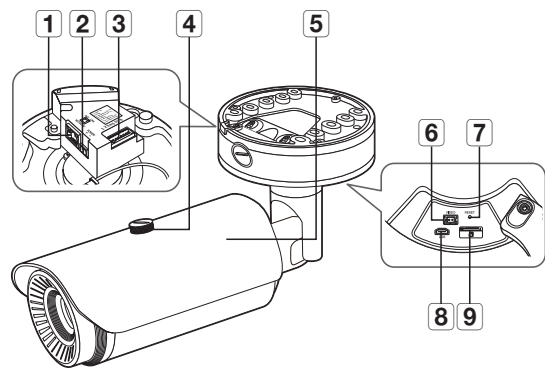
Compruebe si la cámara y los accesorios se incluyen en el paquete del producto.
(Debido a los diferentes países de venta, los accesorios no son los mismos.)

Aspecto	Nombre de elemento	Cantidad	Descripción
	Cámara (TNO-3010T/TNO-3020T/ TNO-3030T/TNO-3040T/ TNO-L3030T)	1	
	Cámara (TNO-3050T)	1	
	Manual de consulta rápida (Opcional)	1	
	Cable para probar el monitor	1	Se utiliza para probar la conexión de la cámara en un dispositivo de visualización portátil
	Plantilla	1	Guía de instalación del producto
	Bloque de terminales de energía	1	Conectado al enchufe
	Bloque de terminales de audio/alarma	1	Conectado al conector de audio/alarma
	Cable de alimentación	1	Se utiliza para conectar al puerto de alimentación
	Llave en L	1	Se utiliza para quitar y sustituir la tapa del domo

Aspecto	Nombre de elemento	Cantidad	Descripción
	Cable de audio/alarma	1	Se utiliza para conectar al puerto de audio y alarma
	Tornillo de rosca cortante	4	Se utiliza para la instalación en pared o en techo
	Protección solar	1	Protege la cámara de la luz directa del sol.
	Soporte de protección solar	1	Fija la protección solar a la cámara.
	BASE WALL MOUNT	1	El adaptador que se debe ajustar para colgar la cámara en la pared
	Pasacables	1	Se utiliza para conectar el cable LAN con un diámetro de Ø7-8,5.

VISTA

Aspecto & Componentes



Elemento	Descripción
1 Puerto Red	Se utiliza para conectar el cable PoE o Ethernet para la conexión de red.
2 Ouerto de Alimentación	Se utiliza para enchufar e l cable de alimentación.
3 Puerto del cable de audio y alarma	Puerto para conectar cables de audio y alarma.
4 Soporte de protección solar	Fija la protección solar a la cámara.
5 Protección solar	Protege la cámara de la luz directa del sol.
6 Puerto de salida del monitor de pruebas	Puerto de salida para monitorizar la prueba de la salida de vídeo. Utilice el cable del monitor de prueba para conectarlo a una pantalla móvil y realizar la prueba de vídeo.
7 Botón de reinicialización	Este botón restaura los valores predeterminados de la cámara. Manténgalo pulsado durante unos 5 segundos para reiniciar el sistema. ❗ Si reinicia la cámara, los ajustes de red se ajustarán de forma que se pueda habilitar DHCP. Si no hay ningún servidor DHCP en la red, debe ejecutar el programa del Device Manager para cambiar los ajustes básicos de la red tales como la dirección IP, la máscara de subred, la puerta de enlace, etc., antes de poder conectarse a la red.
8 Ranura para tarjeta Micro SD	Se trata de una ranura en la que se puede insertar una tarjeta Micro SD.
9 Puerto USB MICRO	Puerto para conectar el dongle Wi-Fi. Puede comprobar el vídeo de instalación a través de las aplicaciones instaladas en el teléfono inteligente. Consulte "Conectar al dongle WiFi" en la página 12. ■ Wifi dongle y adaptador OTG se venden por separado.

INSTALACIÓN

- ! La cámara es resistente al agua y cumple la norma IP66. No obstante, el conector hembra conectado al cable externo no lo es. Se recomienda instalar este producto por debajo del borde de los aleros para evitar que el cable quede en el exterior.

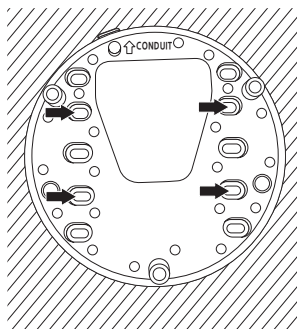
Precauciones antes de la instalación

Asegúrese de leer las siguientes instrucciones antes de instalar la cámara:

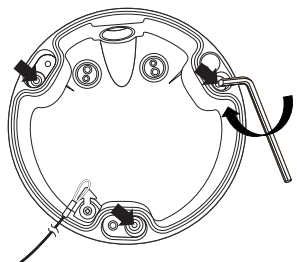
- Debe estar instalada en una zona (techo o pared) que pueda soportar 5 veces el peso de la cámara, incluido el soporte de la instalación.
- Cables doblados o pelados pueden causar daños en el producto o producir un incendio.
- Por razones de seguridad, mantenga alejado a todo el mundo del lugar de la instalación. Y guarde aparte las pertenencias personales, como precaución.
- No utilice el orificio del parasol para ningún otro propósito que no sea para conectar el parasol.
- Si utiliza una fuerza excesiva al instalar el producto, es posible que la cámara pueda sufrir daños y funcione de forma incorrecta.
- Si instala el producto de forma forzada utilizando herramientas no compatibles, es posible que el producto pueda sufrir daños.

Instalación

1. Utilice los cuatro tornillos de rosca incluidos para asegurar el soporte de pared de la base.

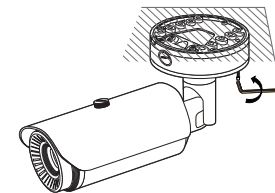


2. Cuelgue el cable de seguridad del gancho que parece una flecha en la cubierta inferior.
3. Conecte los cables adecuados con los terminales de la cámara.
4. Después de colocar la cubierta inferior en el soporte de pared de la base, use la llave en L incluida para conectar y asegurar los tres tornillos.
5. Después de colocar la cámara en la cubierta inferior, use la llave en L incluida para conectar los tres tornillos en la cubierta superior.



6. Ajuste la dirección de la cámara con la llave L suministrada.

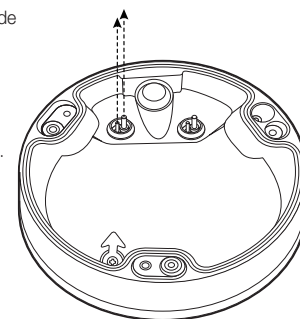
- ! Al ajustar la posición de la cámara utilizando un soporte, afloje el tornillo del soporte, ajuste la cámara, y apriételo. Si intenta ajustarlo a la fuerza cuando el tornillo está apretado, podría causar ralladuras u otros problemas.



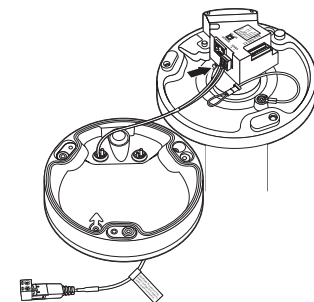
Conexión del cable de alimentación y del cable LAN resistente al agua

1. Retire la parte extruida de la cubierta de goma en la parte inferior de la cubierta inferior como se muestra en la figura siguiente.

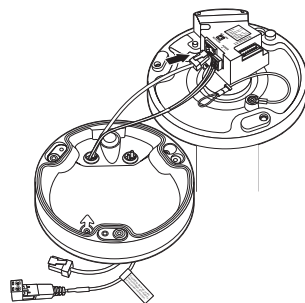
- ! Utilice un pasacables adecuado para conectar el cable LAN.
 - Cámara básica: utilice el cable con diámetro de Ø5~6,5.
 - Componentes suministrados: utilice el cable con diámetro de Ø7~8,5.



2. Inserte el cable de alimentación en el orificio pequeño que se obtiene retirando la parte proyectada del tapón de goma en el paso 1 anterior.
3. Conecte el cable de alimentación al bloque de terminales de alimentación.



4. Introduzca el cable LAN en el orificio grande realizado al retirar la parte proyectada del enchufe en el paso 1.
5. Retire la cubierta con un cortador de cable y alinee los cables.
6. Conecte el cable LAN con un conector LAN, e introdúzcalo en el aparato LAN.
7. Conecte el cable al puerto Ethernet.



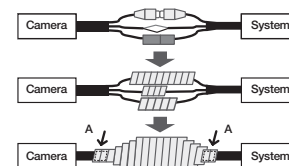
Instalación en el exterior

Cuando instale la cámara en un lugar exterior, impermeabilícela con cinta de goma de butilo resistente al agua (disponible en tiendas), para que el agua no entre por el espacio del cable conectado al exterior.

1. Conecte los cables, como E/S y audio.
2. Envuelva el aislante negro del cable (Área A) y la parte de conexión del cable con cinta (de goma de butilo) impermeable, de modo que más de la mitad de esta cinta quede superpuesta.

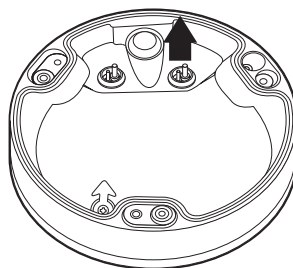


- Si el aislante del cable no se impermeabiliza correctamente, puede haber filtraciones. Asegúrese que el cable queda protegido con una densa capa de cinta.
- La cinta de butilo resistente al agua está fabricada con goma de butilo, que puede estirarse el doble de su longitud normal.

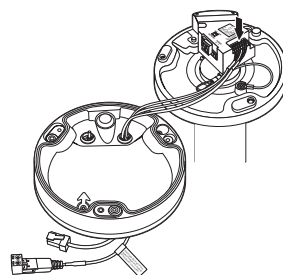


Conexión del cable de alarma y audio

1. Retire la cubierta de goma en la parte inferior de la cubierta inferior como se muestra en la figura siguiente.



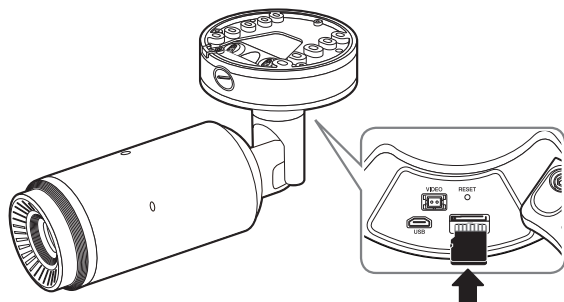
2. Inserte el cable de alarma/audio a través del orificio creado al retirar la tapa de goma en el N° 1, y conecte el cable al terminal de alarma.
3. Alinee el cable para no dañarlo o atraparlo al instalar la cámara.
4. Ponga la tapa de goma ubicada en el cable de alarma/audio en el orificio.



INSERCIÓN/EXTRACCIÓN DE LA TARJETA MICRO SD

Inserción de la tarjeta Micro SD

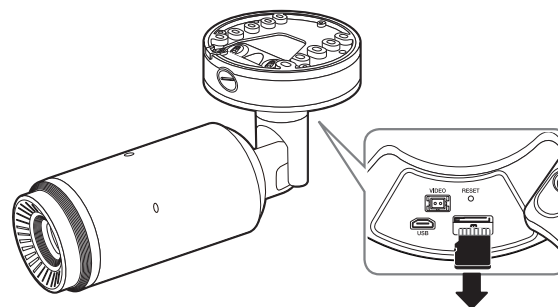
Inserte una tarjeta micro SD en la dirección de la flecha que aparece en la figura.



- Antes de instalar la cámara, debe insertar la tarjeta Micro SD mientras la fuente de alimentación y el cuerpo están separados.
- No lo inserte a la fuerza en la dirección inversa. Podría dañar la tarjeta Micro SD y el producto.
- Cuando llueve o la humedad es alta, no se recomienda que inserte o expulse una tarjeta Micro SD.
- Durante la instalación o extracción de la tarjeta Micro SD, asegúrese de colocar el cuerpo del producto sobre una superficie plana antes de trabajar en él para evitar accidentes por pérdida o caída de piezas.

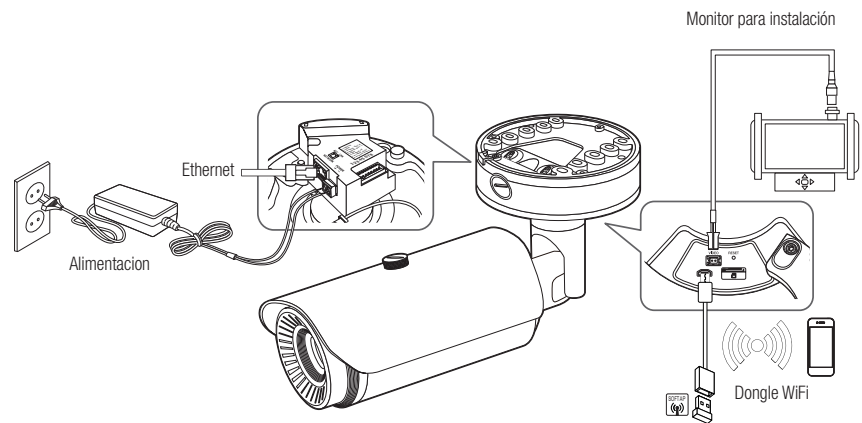
Extracción de la tarjeta Micro SD

Presione suavemente hacia abajo en el extremo expuesto de la tarjeta de memoria como se muestra en el esquema para sacarla de la ranura.



- Antes de extraer la tarjeta Micro SD, en <Configuración (⚙️)>-<Evento>-<Almacenamiento>, ajuste el dispositivo en <Des> y pulse el botón [Aplicar] y apague la cámara.
- Si apaga la cámara o extrae la tarjeta Micro SD que contiene datos, podría perderlos o dañarlos.

CONEXIÓN CON OTROS DISPOSITIVOS



- El puerto de salida del monitor de pruebas del producto se proporciona para una mayor facilidad de instalación y no se recomienda para propósitos de monitoreo.
- El puerto Micro USB del producto se proporciona para facilitar la instalación y no se recomienda para propósitos de monitoreo.
- Es normal que la pantalla se congele durante aproximadamente 1-2 segundos en un intervalo de tiempo determinado o cuando hay un cambio de temperatura del área circundante; la pantalla simplemente está pasando por un proceso de calibración.

Conexión Ethernet

Conecte el cable Ethernet a la red local o a Internet.

Conexión de Wi-Fi

Configuración de la cámara

- Conecte el adaptador OTG (5 pines) y el dongle WiFi al terminal micro USB.

Configuración del smartphone

- Instale la aplicación de instalación de Wisenet.
- Seleccione el SSID de la cámara después de encender el WiFi.
- Ejecute la aplicación de instalación de Wisenet.
- Cuando inicie sesión en la cámara, el vídeo se conectará
 - El vídeo se reproducirá sin estar conectado durante la conexión inicial.
- Puede ajustar el ángulo de visión mientras ve el vídeo a través del smartphone.

Fabricante de dongle recomendado

Fabricante	Modelo
NETIS	WF2123 n300
EDIMAX	EW-7811Un V2 (Nueva versión)
IP Time	N100mini
IP Time	N105L
TP-LINK	TL-WN823N V1
TP-LINK	TL-WN725N
TP-LINK	T2U Nano
ASUS	USB-N13
ASUS	USB-N10 NANO
NETGEAR	WNA3100M
IODATA	WN-G150UMW
IODATA	WN-S150UM
TOTOLINK	N300UM

Alimentación eléctrica

Utilice el destornillador para conectar cada línea (+, -) del cable de alimentación al puerto de alimentación correspondiente de la cámara.

- Cuando se suministre PoE y 12V CC o PoE y 24V CA al mismo tiempo, el equipo se alimentará mediante la fuente externa (24V CA, 12V CC).
- También puede utilizar un enrutador que incorpore PoE para suministrar energía a la cámara.
- Utilice PoE que sea compatible con los protocolos IEEE 802.3af.
- Se recomienda el uso de una única fuente para alimentar el aparato, PoE, 12 V CC o 24 V CA.
- Tenga cuidado de no invertir la polaridad al conectar el cable de alimentación.
- Cuando la alimentación se enciende inicialmente, se requiere un periodo de tiempo para que la pantalla se estabilice. Por este motivo, se realiza una calibración de pantalla cuando la alimentación se enciende al inicio.
- Si desea conectar un dispositivo externo, debe apagar el dispositivo externo antes de continuar.
- Conecte primero el conjunto y la línea de alimentación del adaptador y, a continuación, conecte el cable de alimentación a la toma de la pared.

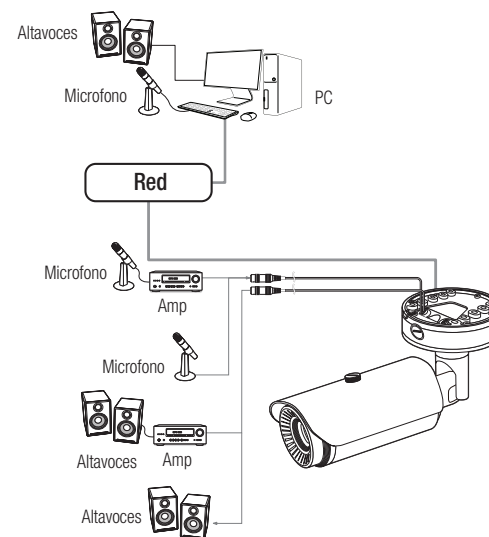
Características del cable de alimentación para cada modelo

Potencia de entrada	Tipo de cable (AWG)	Longitud del cable (Max.)
DC 12V	#18	27 m
	#20	17 m
AC 24V	#18	40 m
	#20	26 m

Características del cable de red

Elemento	Contenido	Observaciones
Conector	RJ45	
Ethernet	10/100Base-T	10/100 Mbps
Cable	UTP de categoría 5e	
Distancia máx.	100 m	
Soporte PoE	IEEE 802.3af	

Conectar la Entrada/Salida de Audio



1. Conecte el puerto AUDIO IN de la cámara con el micrófono o al puerto LINE OUT del amplificador al que está conectado el micrófono.
2. Conecte el puerto AUDIO OUT de la cámara con el micrófono o al puerto LINE IN del amplificador al que está conectado el altavoz.

3. Compruebe las especificaciones de entrada de audio.

• Códec de Audio

- Entrada de audio : G.711 PCM (Velocidad en bits: 64 kbps / Frecuencia de muestreo: 8 kHz), G.726 ADPCM (Velocidad en bits: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps / Frecuencia de muestreo: 8 kHz), AAC (Bit Rate: 48Kbps / Frecuencia de muestreo: 16kHz)

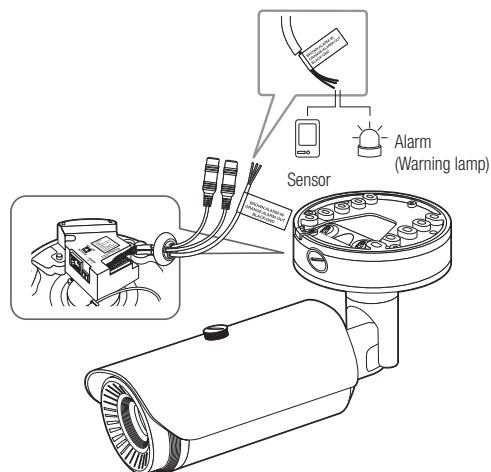
- Salida de audio : G.711 PCM (Velocidad en bits: 64 kbps / Frecuencia de muestreo: 8 kHz)

• Audio Full dúplex

- **Entrada de Audio** : Seleccionable (micrófono/entrada de línea), tensión admitida: 2.5 V CC (4 mA), impedancia de entrada: 2K Ohm
- **Salida de audio** : Salida de línea (conector mono de 3,5 mm), salida máxima: 1 Vrms, Impedancia de salida de línea : 600Ω

Conexión al cuadro del puerto de E/S

Conecte el cable de E/S de la alarma al puerto correspondiente en la caja de puertos.



- ALARM-IN : Se utiliza para conectar el sensor de entrada de la alarma o el sensor externo de día/noche.
- ALARM-OUT : Se utiliza para conectar la señal de salida de alarma.
- GND : Puerto común para la señal de entrada/salida de alarma.

! Si los dispositivos (por ejemplo, luz parpadeante, alarma) que superan los límites de voltaje y potencia se conectan con el método de colector abierto, puede producirse un error de funcionamiento. Consulte el "Diagrama de cableado de salida de alarma" para conectar dispositivos que superan las cifras de voltaje y corriente.

Para conectar el sensor externo

Conecte un filamento de cada línea de señal (2 filamentos) de los sensores al puerto [ALARM IN], y conecte el otro filamento en el puerto [GND].

Diagrama de cableado de entrada de alarma

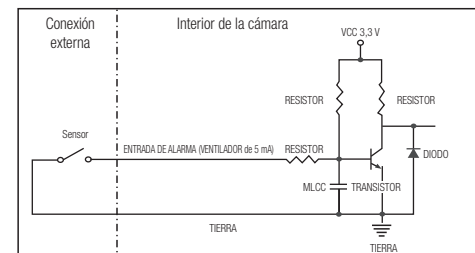
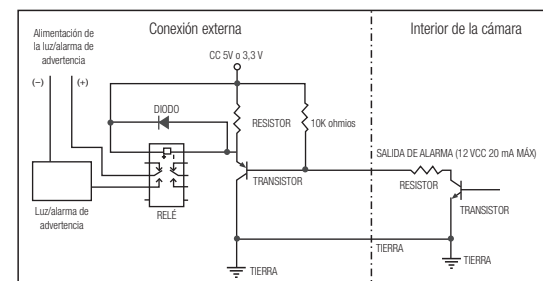


Diagrama de cableado de salida de alarma

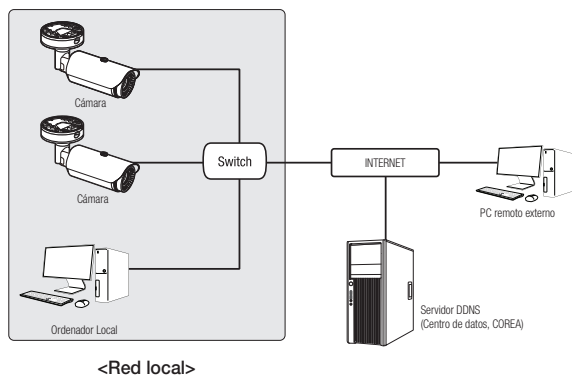


Puede fijar la configuración de red de acuerdo con sus configuraciones de red.

CONECTAR LA CÁMARA DIRECTAMENTE A LA RED DE ÁREA LOCAL

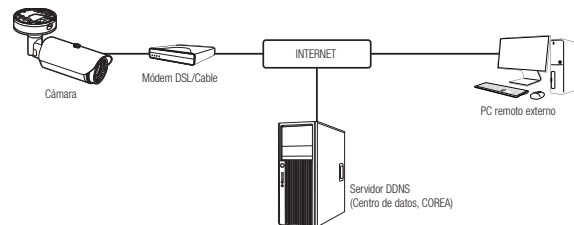
Conectar con la cámara desde un ordenador local en la LAN

1. Abrir un navegador de Internet en su ordenador local.
2. Introduzca la dirección IP de la cámara en la barra de direcciones del navegador.



- Un ordenador remoto con una Internet externa fuera de la red LAN podría no poder conectarse a la cámara instalada en la intranet, en caso de que el reenvío de puertos no esté correctamente configurado o se haya instalado un cortafuegos. En este caso, para solucionar el problema, póngase en contacto con su administrador de red.
- Como valor predeterminado de fábrica, la dirección IP se asignará automáticamente desde el servidor DHCP. Si no hay ningún servidor DHCP disponible, la dirección IP se definirá en 192.168.1.100. Para cambiar la dirección IP, utilice el Device Manager. Para obtener más información sobre el uso del Device Manager, consulte "Cómo usar el Device Manager". (Página 16)

CONEXIÓN DIRECTA DE LA CÁMARA A UN MÓDEM DSL/CABLE BASADO EN DHCP



1. Conectar el PC del usuario directamente a la cámara de red.
2. Ejecute Device Manager y cambie la dirección IP de la cámara para que pueda usar el navegador web de su escritorio para conectarse a la cámara.
3. Utilice el navegador de Internet para conectarse a Web Viewer.
4. Vaya a la página [Config.].
5. Vaya a [Red] – [DDNS] y configure los ajustes de DDNS.
6. Vaya a [Basic] – [IP & Puerto] y establezca el tipo de IP para [DHCP].
7. Conecte la cámara, retirada del PC, directamente en el módem.
8. Reinicie la cámara.

- Para obtener información sobre cómo configurar el DDNS, consulte la ayuda en línea de Web Viewer.
- Para obtener información sobre cómo configurar el formato de IP, consulte la ayuda en línea de Web Viewer

CÓMO USAR EL DEVICE MANAGER

- Puede descargar el programa del Device Manager desde el menú <Support> – <Online Tool> en el sitio web de Hanwha Vision (<https://www.HanwhaVision.com>).
- Asimismo, puede encontrar más instrucciones sobre el Device Manager en el menú <Ayuda> de la página principal.

BÚSQUEDA AUTOMÁTICA DE LA CÁMARA

Si hay una cámara conectada a la misma red del ordenador en donde está instalado el Device Manager, puede encontrar esa cámara de la red usando la función de buscar.

1. Haga clic en <Buscar> en la página principal del Device Manager.
2. Marque la cámara de la lista.
 - Compruebe la dirección MAC en el adhesivo de la cámara.

CÓMO CONFIGURAR LA DIRECCIÓN IP

Si desea cambiar el ajuste de la red de la cámara, el signo <Inicio de sesión Aceptar> debe aparecer en el campo <Estado>. Haga clic en el campo <Autenticación> de la página principal para iniciar sesión.

Configuración de la IP estática

Inserte y configure manualmente la dirección IP y la información del puerto.

1. Haga clic en la cámara de la lista para la que desea cambiar el ajuste de la IP.
2. Haga clic en <IP Assign (Asignación de la IP)> en la página principal del Device Manager.
3. Seleccione <Asignar la siguiente dirección IP>.
 - La información IP de la cámara de mostrará según se ha configurado previamente.
4. Complete las categorías relacionadas con el campo IP & Puerto.

Si no se utiliza un Enrutador de banda ancha

Pida al administrador de la red que establezca el valor de la <Dirección IP>, la <Máscara subred> y la <Gateway(Puerta de enlace)>.

- HTTP Puerto : se utiliza para acceder a la cámara utilizando el explorador de Internet, por defecto en 80.
- RTSP Puerto : este puerto controla la transmisión de datos en tiempo real. Su valor inicial es 554.

Si se utiliza un Enrutador de banda ancha

- IP Address : introduzca una dirección que se encuentre en el rango de IP facilitado por el enrutador de banda ancha.
ej.) 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask : La <Subnet Mask> del enrutador de banda ancha será la <Subnet Mask> de la cámara.
- Gateway : La <Local IP Address> del enrutador de banda ancha será la <Gateway> de la cámara.

- Es posible que los ajustes difieran dependiendo del modelo de enrutador de banda ancha conectado. Para obtener información adicional, consulte el manual de usuario del enrutador aplicable.
- Para obtener información adicional sobre el reenvío de puertos del enrutador de banda ancha, consulte "Configuración de Reenvío del Rango de Puertos (Asignación de Puertos)". (Página 18)

Si el Enrutador de banda ancha tiene más de una cámara conectada

Configure los ajustes relacionados con IP y los ajustes relacionados con Port de forma distinta entre sí.
ej.)

Categoría		Cámara 1	Cámara 2
Ajustes relacionados con IP	Dirección IP	192.168.1.100	192.168.1.101
	Máscara subred	255.255.255.0	255.255.255.0
	Gateway	192.168.1.1	192.168.1.1
Ajustes relacionados con el puerto	HTTP Puerto	8080	8081
	RTSP Puerto	554	555

- Si <HTTP Puerto> se define con un valor distinto a 80, debe facilitar el número de <Port> en la barra de direcciones del explorador de Internet antes de poder acceder a la cámara.
ej.) `http://Dirección IP : HTTP Port`
`http://192.168.1.100:8080`

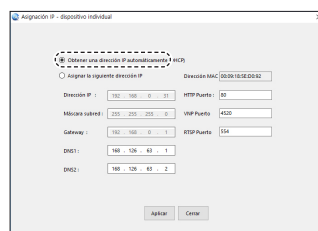
5. Haga clic en el botón [Aplicar].
6. Si aparece el mensaje de que la acción se ha realizado correctamente, haga clic en [Aceptar].

Configuración de la IP dinámica

Reciba la dirección IP desde DHCP

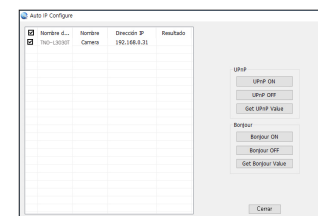
- Ejemplo de entorno de IP dinámica
 - Si a un enrutador de banda ancha, con cámaras conectadas, se le asigna una dirección IP mediante el servidor DHCP
 - Si se conecta la cámara directamente al módem utilizando los protocolos DHCP
 - Si las IP se asignan mediante el servidor DHCP interno a través de la LAN

1. Haga clic en la cámara de la lista para la que quiera cambiar la configuración de la IP.
2. Haga clic en **<IP Assign (Asignación de la IP)>** en la página principal del Device Manager.
3. Seleccione **<Obtener una dirección IP automáticamente (DHCP)>**.
4. Haga clic en botón **[Aplicar]**.
5. Si se muestra el mensaje de acción realizada correctamente, haga clic en **[Aceptar]**.



CONFIGURACIÓN AUTOMÁTICA DE LA IP

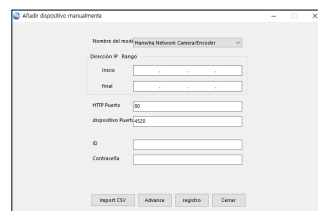
1. Haga clic en la cámara de la lista para la que quiera configurar automáticamente la IP.
2. En la página principal del Device Manager, haga clic en **< + >**.
 - Aparecerá el menú de configuración del equipo.
3. En el menú, haga clic en **<Auto IP Configure (Configuración IP automática)>**.
4. Haga clic en el botón **[Cerrar]**.



CÓMO REGISTRAR LA CÁMARA MANUALMENTE

Si la cámara no puede encontrarse usando la función de buscar, puede registrarla remotamente insertando manualmente la información de la IP si la cámara está conectada a la red externa.

1. Haga clic en **<Add Devices (Agregar dispositivos)>** – **<Añadir dispositivo manualmente>** de la página principal del Device Manager.
2. Inserte el intervalo de la dirección IP que está buscando.
3. Seleccione el **<Nombre del modelo>** de la cámara que ha registrado e inserte el puerto HTTP, la ID y la contraseña.
4. Haga clic en el botón **[Registro]**.
5. Compruebe que la cámara esté registrada.
 - Verifique la dirección MAC en el adhesivo de la cámara.

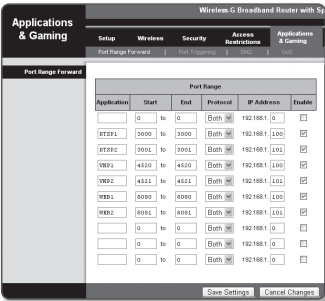


CONFIGURACIÓN DE REENVÍO DEL RANGO DE PUERTOS (ASIGNACIÓN DE PUERTOS)

Si ha instalado un enrutador de banda ancha con una cámara conectada, debe definir el reenvío del rango de puertos en el enrutador de banda ancha de forma que un PC remoto pueda acceder a la cámara en él.

Reenvío manual del rango de puertos

- 1. En el menú de configuración del enrutador de banda ancha, seleccione <Applications & Gaming> - <Port Range Forward>. Para definir el reenvío del rango de puertos para un enrutador de banda ancha de terceros, consulte el manual del usuario de dicho enrutador de banda ancha.
- 2. Seleccione <TCP> y <UDP Port> por cada cámara conectada al enrutador de banda ancha. El número de cada puerto que se configura para el router IP debe establecerse de acuerdo con el número de puerto designado en <Config.> - <Basic> - <IP & Puerto> en el visor web de la cámara.viewer.
- 3. Una vez hecho, haga clic en [Save Settings]. Se guardarán los ajustes.

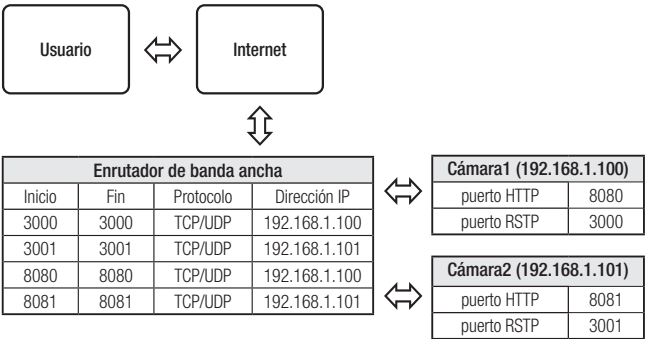


- El ajuste del reenvío del puerto es un ejemplo de configuración del router de la IP de CISCO.
- Es posible que los ajustes difieran dependiendo del modelo de enrutador de banda ancha conectado. Para obtener información adicional, consulte el manual de usuario del enrutador aplicable.

Configuración del reenvío del rango de puertos de varias cámaras de red

- Puede definir una regla de reenvío de puertos en el dispositivo enrutador de banda ancha a través de su página Web de configuración.
- Un usuario puede cambiar los puertos usando la pantalla de configuración de la cámara.

Cuando la Cámara 1 y la Cámara 2 estén conectadas a un enrutador :



- El enrutamiento de puerto se puede hacer sin una configuración adicional del router si este está adaptado para la función UPnP (Universal Plug and Play). Después de conectar la cámara de red, seleccione la casilla de verificación del menú <Conexión rápida> en <DDNS> en "Configuración -> Red -> DDNS".

CONEXIÓN A LA CÁMARA DESDE UN PC LOCAL COMPARTIDO

1. Ejecute el Device Manager.
Rastrear las cámaras conectadas y mostrará una lista de ellas.
2. Haga doble clic en una cámara para acceder a ella.
Se inicia el explorador de Internet y se conecta a la cámara.



- También puede acceder a la cámara introduciendo la dirección IP de la cámara encontrada en la barra de direcciones del explorador de Internet.

CONEXIÓN A LA CÁMARA DESDE UN PC REMOTO A TRAVÉS DE INTERNET

En un ordenador remoto que no esté en el clúster de la red del router de banda ancha no está permitido, por lo que los usuarios pueden acceder a las cámaras dentro de la red de un router de banda ancha mediante el uso de la URL del DDNS de la cámara.

1. Antes de poder acceder a una cámara de una red de enrutador de banda ancha, debe haber definido el reenvío del rango de puertos para el enrutador de banda ancha.
2. Desde el PC remoto, inicie el explorador de Internet e introduzca la dirección URL de DDNS de la cámara, o la dirección IP del enrutador de banda ancha en la barra de direcciones.
ej.) <http://ddns.hanwha-security.com/ID>

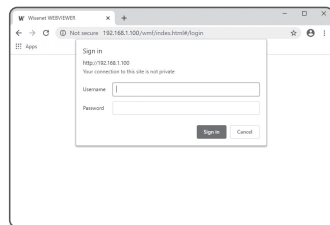


- Para utilizar DDNS, regístrese en la página de inicio de DDNS (<http://ddns.hanwha-security.com>) y registre el producto en **[Mi DDNS]>[Registrar producto]**.

CONEXIÓN A LA CÁMARA

Procedimiento normal

1. Inicie el explorador de Internet.
2. Introduzca la dirección IP de la cámara en la barra de direcciones.
ej.) • Dirección IP (IPv4) : 192.168.1.100 → http://192.168.1.100
- Debe aparecer el diálogo de inicio de sesión.
• Dirección IP (IPv6) : 2001:230:abcd:ffff:0000:0000:ffff:1111 → http://[2001:230:abcd:ffff:0000:0000:ffff:1111] - Debe aparecer el diálogo de inicio de sesión.



Si el número de puerto HTTP no es 80

1. Inicie el explorador de Internet.
2. Introduzca la dirección IP y el número de puerto HTTP de la cámara en la barra de direcciones.
ej.) Dirección IP : 192.168.1.100:HTTP Port number(8080)
→ http://192.168.1.100:8080 - Debe aparecer el diálogo de inicio de sesión.

Utilización del URL

1. Inicie el explorador de Internet.
2. Introduzca el URL de DDNS de la cámara en la barra de direcciones.
ej.) Dirección URL : http://ddns.hanwha-security.com/ID
- Debe aparecer el diálogo de inicio de sesión.

- La conexión de red está desactivada en el entorno LAN.

Para comprobar la dirección de DDNS

Si la cámara está conectada directamente a un módem de cable basado en DHCP o a un módem DSL, la dirección IP cambiará cada vez que intente conectarse al ISP (la compañía a la que se suscribió). Si este es el caso, no se le informará de la dirección IP modificada por el DDNS.

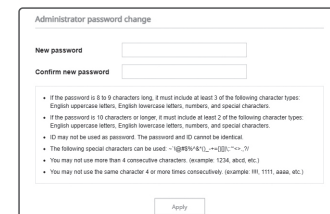
Una vez que registre el dispositivo con IP dinámica en el servidor DDNS, puede fácilmente cambiar la IP modificada cuando intente acceder al dispositivo.
Para registrar el dispositivo en el servidor de <DDNS>, entre en http://ddns.hanwha-security.com y registre primero el dispositivo y, a continuación, establezca <Red> - <DDNS> de Web Viewer en <DDNS>, y facilite el <ID de producto> utilizado durante el registro de DDNS.

CONFIGURACIÓN DE CONTRASEÑA

Al acceder al producto por primera vez, debe registrar la contraseña de inicio de sesión.



- Para una nueva contraseña que tenga entre 8 y 9 dígitos, debe utilizar por lo menos 3 mayúsculas/ minúsculas, 3 números y 3 caracteres especiales. Para una contraseña que tenga entre 10 y 15 dígitos, debe utilizar por lo menos 2 de los tipos mencionados.
- Caracteres especiales que se permiten :
~!@#\$%^&*()_+={}|~\;:'"<>.,?/
~!@#\$%^&*()_+={}|~\;:'"<>.,?/
- No se permiten espacios en la contraseña.
- Para mayor seguridad, no se recomienda repetir los mismos caracteres ni entradas consecutivas de teclado en las contraseñas.
- Si ha perdido su contraseña, puede pulsar el botón [RESET] para iniciar el producto. Así pues, no pierda la contraseña utilizando un bloc de notas o memoricela.



INICIO DE SESIÓN

Siempre que acceda a la cámara, aparecerá la ventana de inicio de sesión. Introduzca el ID de usuario y la contraseña para acceder a la cámara.

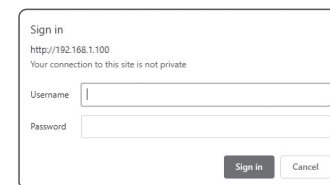
1. Introduzca "admin" en el cuadro de entrada <User name>.
El ID del administrador «admin» se puede modificar en el Web Viewer.
2. Introduzca la contraseña en el campo de entrada <Password>.
3. Haga clic en [OK].
Si ha iniciado sesión correctamente, verá la pantalla de Live Viewer.



- Al acceder al visor de la cámara web, preste especial atención a la seguridad comprobando que los datos de imagen estén encriptados.



- Podrá disfrutar de la mejor calidad de video si el tamaño de pantalla es del 100%. Si se reduce la relación existe el riesgo de cortar la imagen en los bordes.



CONFIGURACIÓN DEL VISOR WEB DE LA CÁMARA

1. Haga clic en el icono [Configurar (⚙)].
2. Aparece la ventana de Ajustes.
3. Puede configurar a través de la red los ajustes de información básica de la cámara, video, audio, red, evento, análisis y sistema.
4. Haga clic en <Ayuda (🔍)> para ver descripciones detalladas de cada función.

SOLUCIÓN DE PROBLEMAS

PROBLEMA	SOLUCIÓN
Quando un usuario de Windows 10 accede al visor web a través de Chrome o Firefox, el volumen de sonido del micrófono cambia periódicamente.	Esto es lo que sucede cuando el controlador del micrófono se ha configurado en el controlador Realtek. Instale el dispositivo de audio de alta definición (controlador predeterminado de Windows) o el controlador de terceros como el controlador de micrófono.
No se visualiza ningún vídeo al acceder al visor web sin plug-in en Safari a través de HTTPS.	- En la ventana emergente de autenticación que aparece cuando se accede inicialmente a https, haga clic en "Ver certificado de autenticación" y seleccione la casilla "Confiar siempre al conectar con la IP del visor web designado". - Si el visor web continúa sin mostrar un vídeo después de seleccionar "Siguiente" en la ventana de mensaje siguiente, pulse la tecla de Comando + Q para salir del navegador Safari, obtenga acceso de nuevo y siga los procedimientos indicados anteriormente.
No se puede acceder a la cámara desde un navegador web.	- Compruebe para asegurarse de que las configuraciones de Red de la cámara son las apropiadas. - Compruebe para asegurarse de que todos los cables de red se han conectado bien. - Si está conectado mediante DHCP, compruebe que la cámara puede admitir direcciones IP dinámicas sin problemas. - Si la cámara está conectada al Enrutador de banda ancha, compruebe que el reenvío de puertos está configurado adecuadamente.
El Visualizador se desconecta durante el control.	- Los Visualizadores conectados se desconectan debido a cualquier cambio en las configuraciones de cámara o de red. - Compruebe todas las conexiones de red.
La cámara conectada a la red no se detecta en el programa del Device Manager.	Apague las configuraciones de cortafuegos en su ordenador, y luego vuelva a buscar la cámara.
Se superponen imágenes.	Compruebe si dos o más cámaras están configuradas en una única dirección multicast en lugar de diferentes direcciones. Si se utiliza una única dirección para varias cámaras, las imágenes se pueden superponer.
No aparece imagen.	Si el método de transmisión está configurado como multicast, compruebe si hay un router que admita multicast en el LAN al que esté conectado la cámara.
La voz no se graba aunque se configuren los ajustes de entrada de audio.	Debe activar la casilla <Entrada de audio> en <Básico> - <Perfil de vídeo>.

PROBLEMA	SOLUCIÓN
<Detección de movimiento> de <Analítica> está ajustado en <Activar>, pero no me llega una notificación por correo electrónico, ni siquiera cuando se ha producido un evento de análisis.	- Verifique los ajustes en la secuencia siguiente: - Compruebe los ajustes de <Fecha y hora>. <Detección de movimiento> debe definirse en <Activar>. - Compruebe si la opción <E-mail> del menú <Config. de evento> está marcada para ser utilizada.
No se encuentra ninguna señal en el puerto de salida de alarma cuando se genera un evento de análisis de vídeo inteligente.	Compruebe los ajustes del puerto de salida de alarma.
No se puede grabar en la tarjeta Micro SD.	- Compruebe si la tarjeta de memoria está defectuosa. - Al reemplazar la tarjeta Micro SD, hágalo mientras el dispositivo esté desconectado de la alimentación.
La tarjeta Micro SD está insertada pero la cámara no funciona correctamente.	- Compruebe si la tarjeta Micro SD se ha insertado en la dirección correcta. En esta cámara, no se garantiza el funcionamiento de una tarjeta Micro SD formateada con otros dispositivos. - Vuelva a formatear la tarjeta Micro SD en <Config.> → <Evento> → <Almacenamiento> menú.
No se puede grabar en la NAS.	Compruebe que la información registrada en la NAS es correcta.
Se está indicando que la configuración de la NAS ha fallado.	- Compruebe que la dirección IP de NAS sea válida. - Compruebe que el ID / contraseña de NAS sea válido - Compruebe que puede acceder a la carpeta designada como la carpeta básica utilizando el ID de la NAS. - Asegúrese de que los elementos SMB / CIFS de NAS estén sin marcar. - Compruebe que la dirección IP de NAS y la dirección IP de la cámara tengan el mismo formato. Ejemplo) el valor inicial de la NAS y de la máscara de subred de la cámara es 255.255.255.0. Si la dirección IP es 192.168.20.32 entonces la dirección IP de NAS debe estar entre 192.168.20.1 y 192.168.20.255. - Verifique si ha intentado acceder como otro usuario sin formatear la carpeta básica almacenada o usada. - Compruebe que utilizó las unidades NAS recomendadas.
Algunos ruidos pueden ser visibles en la pantalla.	Considerando la naturaleza de la cámara térmica, se hace necesario un tiempo de estabilización después de encenderla. Durante este tiempo, podrían aparecer algunos ruidos en la pantalla, pero normalmente desaparecen después de unos 30 minutos. Este tiempo podría prolongarse en función de las características del detector.

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iproute2-4.3.0	GPL 2.0	
iptables-1.4.21	GPL 2.0	http://ftp.netfilter.org/pub/iptables
ethtool-4.2	GPL 2.0	
mtdd-1.5.2	GPL 2.0	ftp://ftp.infradead.org/pub/mtdd-utils
mi-diag-2.11	GPL 2.0	
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wpa_supplicant-2.5	GPL 2.0	
bash-4.3.30	GPL 3.0	
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The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

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revised on June 17, 2004
revised on December 21, 2006
revised on March 24, 2009

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Mark Gates

Ajay Tirumala

Jim Ferguson

Jon Dugan

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Jean-loup Gailly Mark Adler

jloup@gzip.org madler@alumni.caltech.edu

The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files <http://www.ietf.org/rfc/rfc1950.txt> (zlib format), [rfc1951.txt](http://www.ietf.org/rfc/rfc1951.txt) (deflate format) and [rfc1952.txt](http://www.ietf.org/rfc/rfc1952.txt) (gzip format).

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(Aplicable en la Unión Europea y en países europeos con sistemas de recogida selectiva de residuos)
La presencia de este símbolo en el producto, accesorios o material informativo que lo acompañan, indica que al finalizar su vida útil ni el producto ni sus accesorios electrónicos (como el cargador, cascos, cable USB) deberán eliminarse junto con otros residuos domésticos. Para evitar los posibles daños al medio ambiente o a la salud humana que representa la eliminación incontrolada de residuos, separe estos productos de otros tipos de residuos y reciclelos correctamente. De esta forma se promueve la reutilización sostenible de recursos materiales. Los usuarios particulares pueden contactar con el establecimiento donde adquirieron el producto o con las autoridades locales pertinentes para informarse sobre cómo y dónde pueden llevarlo para que sea sometido a un reciclaje ecológico y seguro. Los usuarios comerciales pueden contactar con su proveedor y consultar las condiciones del contrato de compra. Este producto y sus accesorios electrónicos no deben eliminarse junto a otros residuos comerciales.



Eliminación correcta de las baterías de este producto

(Aplicable en la Unión Europea y en otros países europeos con sistemas de recogida selectiva de baterías.)

La presencia de esta marca en las baterías, el manual o el paquete del producto indica que cuando haya finalizado la vida útil de las baterías no deberán eliminarse junto con otros residuos domésticos. Los símbolos químicos Hg, Cd o Pb, si aparecen, indican que la batería contiene mercurio, cadmio o plomo en niveles superiores a los valores de referencia admitidos por la Directiva 2006/66 de la Unión Europea. Si las baterías no se desechan convenientemente, estas sustancias podrían provocar lesiones personales o dañar el medioambiente. Para proteger los recursos naturales y promover el reciclaje, separe las baterías de los demás residuos y reciclelas mediante el sistema de recogida gratuito de su localidad.

